

# **Lake Ontario**

**Mrs. Idema**

## Table of Contents

<u>White</u> (suggested color coding)	
Groups .....	39
Weekly Agenda and Group Activity Schedule (1st week) .....	40
Weekly Agenda and Group Activity Schedule (2nd week) .....	41
KWL .....	42
Homework - water .....	43
Water Tasting Survey .....	44
Vocabulary .....	45
Field Trip Survey (4) .....	47
Video/Movie/Film Strip Form (2) .....	48
Speaker Form (10) .....	49
Bingo .....	50
<u>Blue</u> (suggested color coding)	
What if.....	51
Do You Know? .....	52
Water - The Universal Solvent .....	53
Did You Know? .....	54
Water Cycle .....	55
Hydrological Cycle .....	56
Water Sources.....	58
Water Sources - map .....	59
Water Treatment.....	60
Lake Michigan Water Intake & Filtration Plant .....	61
Water Use.....	62
How Can We Save Water? .....	63
Water Intake Crib .....	64
Zebra Mussels.....	65
G.R. Wastewater Treatment Plant .....	66
Plant Description .....	67
<u>Orange</u> (suggested color coding)	
Sailboat Regatta .....	68
The Mighty Great Lakes.....	69
Dry Dock: Soc. St. Work Package .....	70
Profile Drawing of the Great Lakes .....	71
<u>Yellow</u> (suggested color coding)	
Fishy Fact Wall and Game .....	72
Fishy Facts .....	73
Creative Writing activities .....	74
Drama for Water .....	75
Create a Rainfall.....	76
Help Clean Up the Great Lakes .....	77
Activities.....	78
<u>Green</u> (suggested color coding)	
Water: "The Universal Solvent" .....	79
Water: Dew Point.....	80
Water: The Electrolysis of Water .....	81
Water: The Polar Molecule-Surface Tension .....	82
Water: The Distillation of Water .....	83
Dripping Wet .....	84
Water: Relative Humidity.....	85
<u>Pink</u> (suggested color coding)	
Lab - Porosity .....	86
What Do You Know About H <sub>2</sub> O? .....	87
Water Tally .....	89
The Great Lakes Skill: Graphing .....	90
Circle Graph .....	91
Surf'n Sand Count .....	92
Great Lakes Math.....	93

## **GROUP IDENTIFICATION**

**Group I**      Lake Superior  
                  Lake St. Clair  
                  Lake Huron

**Group II**     Lake Erie  
                  Lake Michigan  
                  Lake Ontario

**Group A**      Lake Michigan  
                  Lake Erie

**Group B**      Lake Huron  
                  Lake St. Clair

**Group C**      Lake Superior  
                  Lake Ontario

1st WEEK	13 MONDAY	14 TUESDAY	15 WEDNESDAY	16 THURSDAY	17 FRIDAY
1ST HR.	(1ST HOUR) LAKE GROUPS PASS PORT	GROUP I: LOBBY WELL DIGGING GROUP II: LK. MI-MR. VANDERMOERE LK. ONTARIO- MRS. IDEMA'S RM.		GROUP A: LIBRARY MR. DYKEMA	
2ND HR.	INTRODUCTION WATER TASTING VIDEO			GROUP B: BAND ROOM MR. FRANTIK	
3RD HR.		MRS. HOWSE'S RM.	DRY	GROUP C: MRS. IDEMA'S RM MRS. IDEMA	DRY
4TH HR.		LK. ERIE- MRS. HOWSE'S RM.	DOCK		DOCK
5TH HR.			DAY		DAY
6TH HR.	GROUP I: (LOBBY)	GROUP II: LOBBY			GROUP I: LIBRARY ENSIGN WARD
7TH HR.	MR. BOSS			GROUP II: REGATTA INTRO CAFETERIA	MR. VANDERMOERE
	GROUP II: (CAFETERIA) VIDEO				

2nd WEEK	20 MONDAY	21 TUESDAY	22 WEDNESDAY	23 THURSDAY	24 FRIDAY
1ST HR.	GROUP A: LIBRARY MR. NEWHOF	GROUP B: MR. BOSS' ROOM		FIELD TRIP DAY	FINAL DAY CELEBRATION BREAKFAST
2ND HR.				BUS 1: LAKE MICHIGAN LAKE ERIE FRESH WATER	REGATTA FINALS SAIL DEMO. STAFF
3RD HR.	DRY	DRY	DRY	DOCK	BUS 2: LAKE HURON LAKE MICHIGAN FRESH WATER
4TH HR.	DOCK			DOCK	BUS 3: LAKE SUPERIOR LAKE ONTARIO WASTE WATER
5TH HR.				DAY	VIDEO
6TH HR.					LAKES GO TO THEIR FIRST HOUR ROOMS
7TH HR.					

## KWL

Student name \_\_\_\_\_  
Lake name \_\_\_\_\_

What do I already know?

1	What do I want to know?	1	What did I learn?
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	
9		9	
10		10	
11		11	
12		12	
13		13	
14		14	
15		15	
16		16	
17		17	
18		18	
19		19	
20		20	

## **Homework - water**

Student name \_\_\_\_\_

Lake Name \_\_\_\_\_

1. List ways water might be wasted in your home?

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2. List ways water is conserved in your home?

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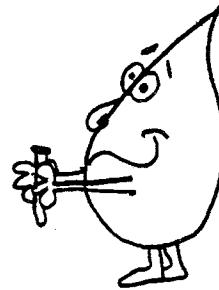
## Water Tasting Form

Student name \_\_\_\_\_

Lake Name \_\_\_\_\_

	sweet	smell	bitter	salty	appearance
Sample 1					
Sample 2					
Sample 3					
Sample 4					
Sample 5					
Sample 6					

## Water Tasting Survey



1. Which water sample tasted the sweetest? \_\_\_\_\_
2. Which water sample smelled the best? \_\_\_\_\_
3. Which sample was the most bitter? \_\_\_\_\_
4. Which sample was the saltiest? \_\_\_\_\_
5. Which sample looked the best? \_\_\_\_\_
6. Which sample did you like the most and explain your choice.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. Which sample was the worst and explain why.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Vocabulary List

Aquifer -

Surface water -

Coagulation -

Sedimentation -

Disinfection -

Aeration -

Chlorination -

CSO -

water main -

bay -

rapids -

volume -

turbidity -

properties -

solvent -

percolation -

evaporation -

ground water -

flocculation -

filtration -

electrode -

ground subsidence -

sludge -

effluent -

water valve -

river mouth -

river source -

retention basin -

dew point -

soluble -

relative humidity -

electrolysis -

saturated -

pollution -

regatta -

characteristics -

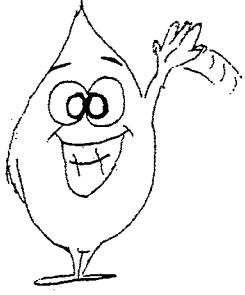
transportation -

reservoirs -

distillation -

hydrology -

humidity -



## Field Trip Survey

Student name \_\_\_\_\_

Lake Name \_\_\_\_\_

1. Location \_\_\_\_\_

2. Purpose \_\_\_\_\_

3. What did you learn? (List 4 facts)

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4. How did this trip and what you learned relate to water. \_\_\_\_\_

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5. What did you like? \_\_\_\_\_

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6. What did you dislike? \_\_\_\_\_

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7. Should we include or exclude this trip next year? Yes / No and Why? \_\_\_\_\_

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## **Video / Movie / Film Strip Form**

Student name \_\_\_\_\_

Lake Name \_\_\_\_\_

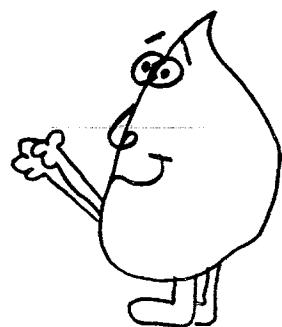
1. Name of movie: \_\_\_\_\_

2. Purpose: \_\_\_\_\_

3. What did I learn about water or related topic? (List four facts you learned.)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. How do these facts relate to water? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. What was good about this video? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## Speaker Form

Student name \_\_\_\_\_

Lake Name \_\_\_\_\_

1. Speaker's Name \_\_\_\_\_

2. Speaker's Topic \_\_\_\_\_

3. Speaker's Occupation \_\_\_\_\_

4. Educational background or classes needed for this occupation.

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5. How does this occupation relate to water?

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6. What was the speaker's main idea and list 3 other ideas given by the speaker.

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7. Additional comments or opinion.

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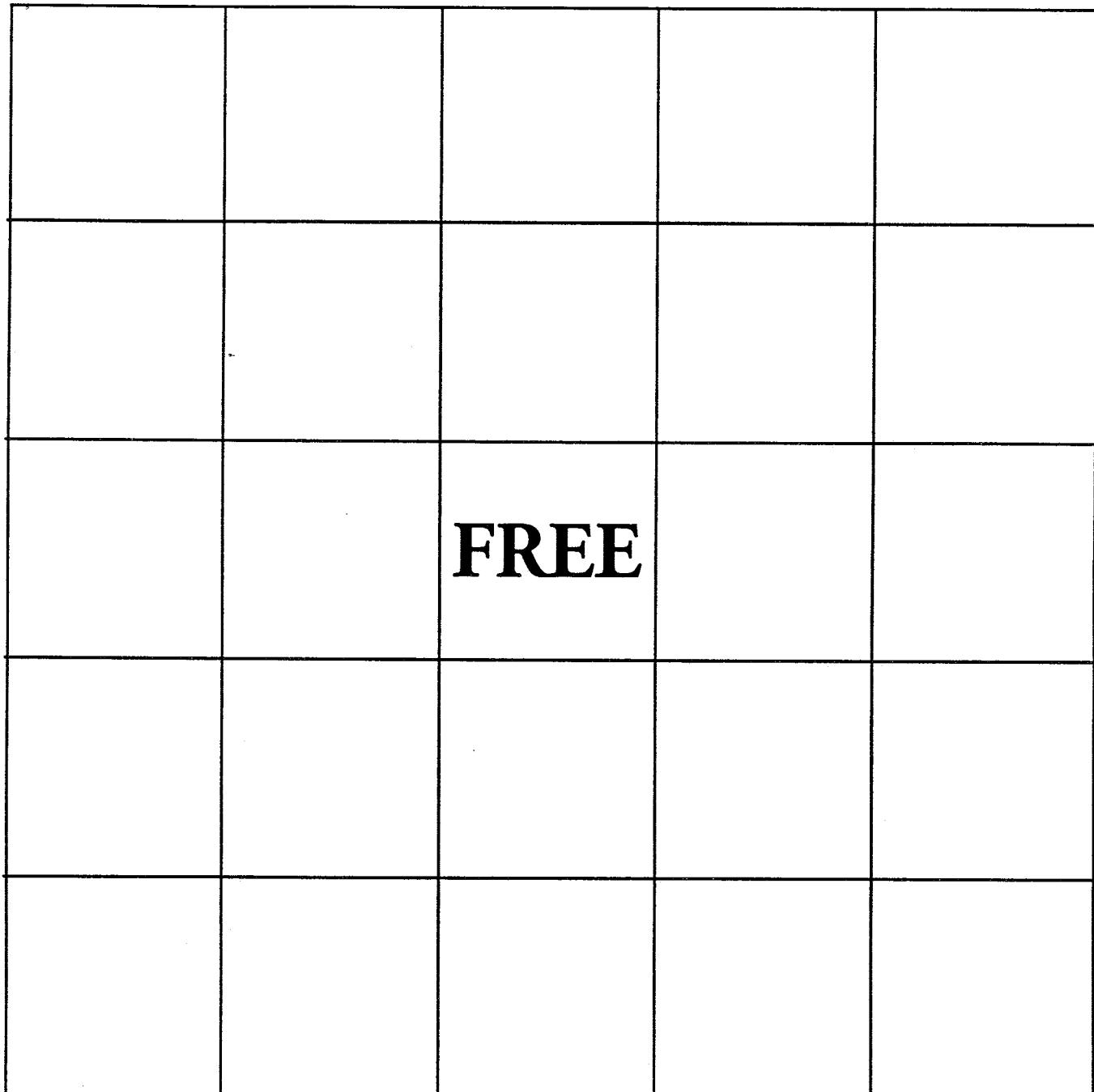
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# B I N G O



## WHAT IF . . .

What would happen if there wasn't any water on the earth?

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Would there be any living things? \_\_\_\_\_

What would the earth look like? (Make a drawing)

**Facts:** •Without water there would be no life.

•The earth would look like the moon.

•Your body consists of 70% water.

(Water transports waste, keeps our body temperature stable, lubricates joints, and makes up 83% of our blood.)

•A person can live for several weeks without food but only a few days without water.

•Only half of our water comes from drinking, the other half comes from the food we eat. (at least 8 glasses a day!)



## DO YOU KNOW?

Think back to the activities on the first day of your water unit.

The amount of water on earth was represented by the 5 gallon jugs filled with water. Remember, more than 70% of the earth's surface is covered by water.

The 2 1/2 cups we poured into the glass jar equaled the amount of fresh water. Ninety-seven percent was salt water which, without extensive, expensive treatment could not be used by humans for drinking.

Of this 3%, two thirds is frozen in the polar ice caps. This could be used but is too far away to be made available for people to use.

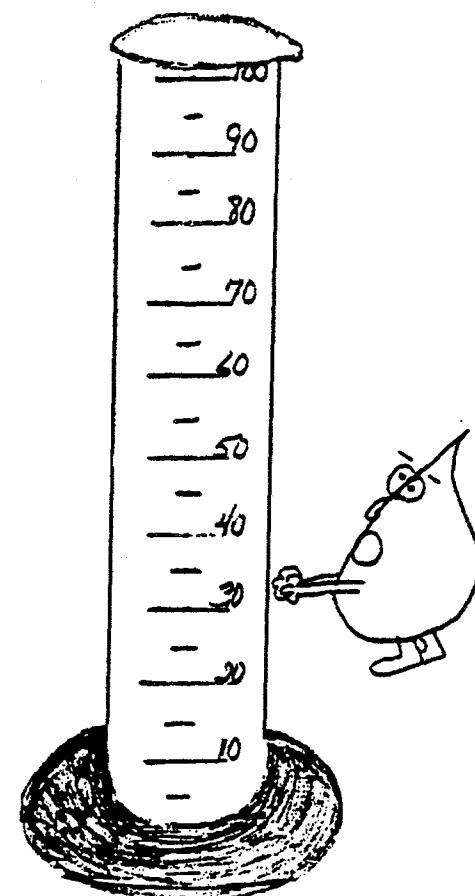
That leaves only 1% of the world's water available for use and most of this is found underground. Water for industry, heating and cooling, recreation, transportation, drinking and everything else.

Look at the graduated cylinder on the right side of the page.

Color 97 ml green, indicating the total salt water.

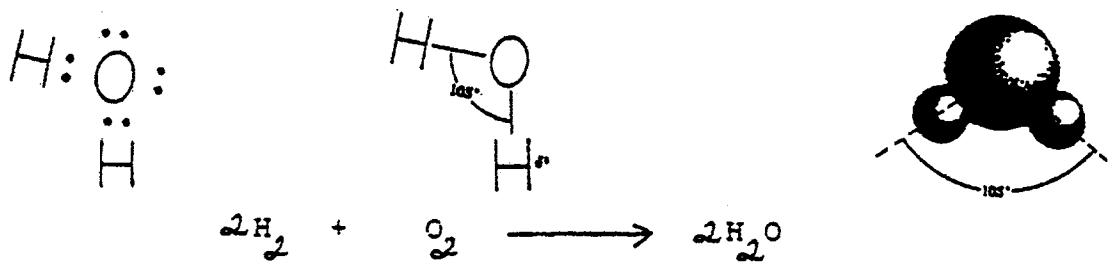
Color 2 ml yellow, indicating water frozen in the polar ice caps.

Color 1 ml blue, indicating usable fresh water.



# WATER - THE UNIVERSAL SOLVENT

The smallest unit of matter which can exist as an element is an atom. When two or more atoms cling together and act as a single unit they form molecules. Hydrogen and oxygen atoms lock together to form water molecules.



A solvent is anything that will dissolve another substance. Solutes are the substances which are dissolved by breaking them into ions. Most solvents are liquids but a few are gases. Water is considered a universal solvent because it can dissolve almost anything.

Solvent + Solute = Solution

Why does this property of water make using it an advantage?

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A disadvantage?

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## DO YOU KNOW . . . .

Did you know that water comes in three different forms?  
Those forms are:

### SOLID

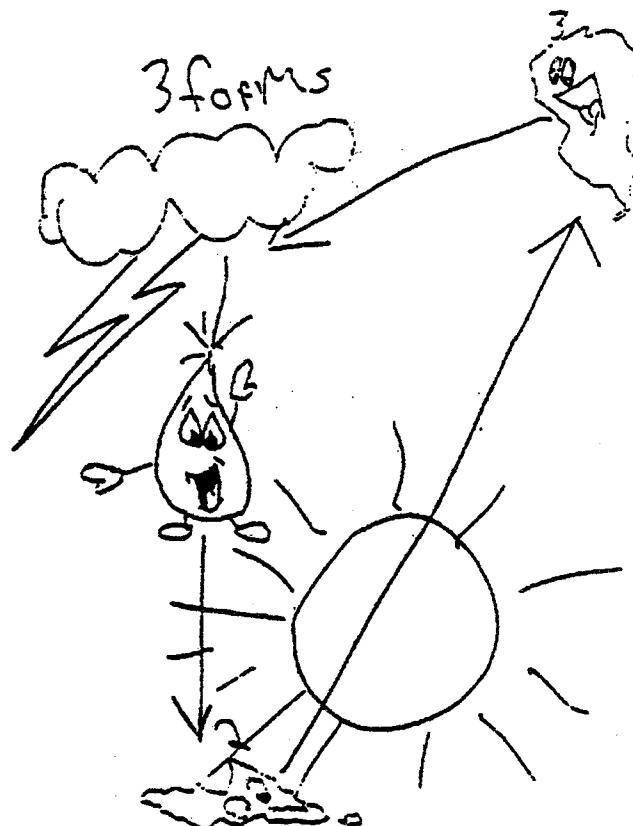
The solid form of water is actually frozen water, or ice. Liquid water becomes ice by freezing at 0° Celsius or 32° Fahrenheit. Ice floats because as it freezes, it becomes lighter or less dense.

### LIQUID

Water in its liquid form is wet and fluid. This form is extremely familiar to us, because it is used in many ways. We use water in its liquid form to wash clothes or dishes, to drink, and to cook. Water is used to clean many things, even ourselves!

### GAS

When water is in the other two forms, we can see it. But when it is a gas, water is invisible. Water, as a gas, is in the air all around us, but we cannot see it. When water is boiled, it changes to a gas. Water boils and steam forms at 100° Celsius and 212° Fahrenheit. The steam that we see when this happens is actually water vapor that is starting to cool.



# WATER SCRAMBLE

USE THE KEY BELOW TO DISCOVER AN INTERESTING FACT ABOUT  
OUR AMAZING WATER CYCLE !!

A	=	!	J	=	)	S	=	{
B	=	@	K	=	+	T	=	}
C	=	#	L	=	-	U	=	[
D	=	\$	M	=	?	V	=	]
E	=	%	N	=	/	W	=	
F	=	^	O	=	>	X	=	--
G	=	&	P	=	<	Y	=	^^
H	=	*	Q	=	~	Z	=	..
I	=	(	R	=	_			

IN THE \* ^& \$ |\_| > - > & ( #      # ^& # - % ,  
|| ! } % |\_| CHANGES FROM { > - ( \$      |\_>  
- ( ~ [ ( \$      } & ! {  
OVER AND OVER AGAIN !

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IN THE -  
-  
OVER AND OVER AGAIN !